



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,806	10/06/2003	Wen-Feng Liu	P26,257-C USA	3311
23307	7590	10/26/2005	EXAMINER	
SYNNESTVEDT & LECHNER, LLP 2600 ARAMARK TOWER 1101 MARKET STREET PHILADELPHIA, PA 191072950			ASINOVSKY, OLGA	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/679,806

Applicant(s)

LIU ET AL.

Examiner

Olga Asinovsky

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14, 15 and 23-49 is/are pending in the application.
- 4a) Of the above claim(s) 2, 16, 35-41 and 43-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14, 15 and 23-34 and 42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/14/2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Cancellation of claim 13 is noted.

Claims 16-22 are withdrawn from consideration as a non-elected invention.

In applicants' response to restriction requirement on January 21, 2005, applicants elect without traverse to prosecute the claims 1-15 of Group I with the species of polymerizable vinyl ester as defined in claim 8.

New claims 23-49 are added in the amendment of 06/23/2005 and a supplemental reply of August 15, 2005.

#### ***Response to Amendment***

1. Newly submitted claims 35-41 and 43-49 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the new independent claim 35 requires a "polymerizable vinyl ester wherein said monomer comprises monomer that is aromatic." Claim 35 contains species that is aromatic monomer in a polymerizable vinyl ester. If the aromatic monomer in a polymerizable vinyl ester was presented before during the Election/Restriction action it could be restricted. Because a polymerizable vinyl ester compound in claim 1 can be a linear polymer.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 35-41 and 43-49 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 112***

2. Claims 42, 6, 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

New claim 42 is redundant to a claim 8. Claim 42 is identical to claim 8.

3. Claim 6 recites the limitation "comprises acrylate that is at least tetra-functional" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim 6. Claim 6 is depending on claim 5. Claim language in claim 5 "consisting essentially of" limits the scope of acrylate that is at least tri-functional. The examiner suggests change dependency to claim 1.

4. Claim 27 recites the limitation "acrylate comprises acrylate that is at least tetra-functional" in line 2. There is insufficient antecedent basis for this limitation in the claim 27. Claim 27 is depending on claim 26. Claim language in claim 26 "consisting essentially of" limits the scope of acrylate that is at least tri-functional. The examiner suggests change dependency to claim 1.

***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

Art Unit: 1711

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-12, 14-15, 23-34 and 42 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-45 of copending Application No. 10/679,871 (Pub. No. US 2004/0127680) in view of Parish et al U.S. Patent 5,891,942. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite a curable adhesive composition comprising polymerizable vinyl ester comprising the reaction product of a compound containing an ethylenically unsaturated group with epoxy compound, curing catalyst and an activator. A pull out performance for the adhesive composition is readable in claims 13-45 of Application No. 10/679,871.
7. The difference is that the present claims include reactive multifunctional acrylate. A multifunctional acrylate is a polymerizable compound.
8. Parish discloses a multifunctional compound that has a benefit to increase the crosslink density of the coating, col. 3, line 56. It would have been obvious to one of ordinary skill in the art to expect the presence of said multifunctional acrylate in a curable adhesive composition in claims 1-45 of application No. '871 to increase adhesive properties of the adhesive composition, support of that can be found in Parish' 5,891,942 at col. 3, lines 56.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1711

9. Claims 1-12, 14-15, 23-34 and 42 are provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/679,871 (Pub.No.: US 2004/0127680) which has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e) if published or patented. This provisional rejection under 35 U.S.C. 103(a) is based upon a presumption of future publication or patenting of the conflicting application. See explanation in the paragraphs 3-4 above. Also, a multifunctional acrylate is readable in the disclosure of the Pub. No. US 2004/0127680 at page 4 [0056].

This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending application under 37 CFR 1.131. This rejection might also be overcome by showing that the copending application is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1711

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-7, 9-12, 14-15, 23-28, 30-34 and 42 are rejected under 35 U.S.C.

103(a) as being unpatentable over Rancich et al U.S. Patent 5,965,635 in view of Mani U.S. Patent 3,816,283 or EP 0 875 546.

Rancich discloses an adhesive composition comprising methacrylate ester/methacrylic acid copolymer soluble in the methacrylate ester monomer, a free radical initiator and a catalyst activator, col. 3, lines 15-67, col. 4, lines 16-47. Methacrylate ester monomer can include tetrahydrofurfuryl ester of methacrylic acid, col. 3, line 34, that is readable for being a multifunctional acrylate in the present claim 1. Methacrylate ester monomer component may be a mixture of different methacrylate monomers, col. 3, lines 41-44. The composition has a high pull out performance, col. 8, lines 30-67, col. 11, lines 65-67.

Rancich does not disclose a tri-functional acrylate.

Mani discloses polyunsaturated polymerizable acrylate monomer such as trimethylol propane trimethacrylate, col. 3, lines 23-25.

EP 0875546 discloses acrylate-based composition including a resin component such as vinyl polyester, at least one multifunctional acrylate component such as trifunctional (meth)acrylate an activating agent and an accelerating agent and promoter, col. 2, [0008], col. 3, [0014] and [0015]; col. 4, [0019] and [0020].

Art Unit: 1711

It would have been obvious to one of ordinary skill in the art to employ a trimethylol propane trimethacrylate monomer in Mani invention or multifunctional (meth)acrylate in EP'546 into an adhesive composition of Rancich invention for the purposes to increase crosslinking performance and adhesive value.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art of July 14, 2005 has been considered.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.



Art Unit: 1711


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

O.B.

October 17, 2005

Olga Asinovsky  
Examiner  
Art Unit 1711

  
James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700